

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims.

1-45. (Cancelled)

46. (New) A method of inducing remodeling of the skin, comprising:
generating a beam of radiation having a wavelength of between about 1.3 and 1.8
microns;
directing the beam of radiation to a targeted dermal region;
cooling an epidermal region of the skin above the targeted dermal region to
minimize injury to the epidermal region; and
causing sufficient thermal injury, including partially denaturing collagen, to
trigger a biological response that leads to remodeling of the skin.

47. (New) The method of claim 46 further comprising generating a beam of radiation
having a fluence of between 10 and 150 Joules per square centimeter or a power density
of between 5 and 100 Watts per square centimeter.

48. (New) The method of claim 46 further comprising directing the beam of radiation to
a targeted dermal region between 100 microns and 1.2 mm below a wrinkle in the skin.

49. (New) The method of claim 46 wherein the cooling step comprises cooling the
epidermal region of the skin above the targeted dermal region before, during, or both
before and during the step of causing thermal injury within the targeted dermal region.

50. (New) The method of claim 46 further comprising accelerating collagen synthesis in
the targeted dermal region.

51. (New) The method of claim 46 further comprising causing thermal injury to the targeted dermal region sufficient to elicit a healing response that produces substantially unwrinkled skin.

52. (New) The method of claim 46 further comprising stretching the skin along a wrinkle disposed above a targeted dermal region.

53. (New) The method of claim 46 further comprising activating fibroblasts which deposit increased amounts of extracellular matrix constituents in the targeted dermal region.